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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,920	02/22/2007	Takafumi Ozaki	OCB-228-A	9234
21828 7590 06/23/2009 CARRIER BLACKMAN AND ASSOCIATES 24101 NOVI ROAD SUITE 100 NOVI, MI 48375				
EXAMINER				
BROWN, DREW J				
ART UNIT		PAPER NUMBER		
3616				
NOTIFICATION DATE		DELIVERY MODE		
06/23/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/580,920

Applicant(s)

OZAKI ET AL.

Examiner

DREW BROWN

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/30/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-824)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 10/31/08, 6/16/08, & 5/30/06

DETAILED ACTION

Claim Objections

1. Claims 2 and 7 are objected to because of the following informalities:
In line 9 of claim 2, "the said" should be changed to --said--.
In line 9 of claim 7, "is rotatable" should be changed to --are rotatable--.
Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
3. Claims 1-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
In claims 1, 2, and 5-7, the recitations of "both hands of an occupant" and "left and right hands of an occupant" are directed to non-statutory subject matter because a human being is being claimed. Similarly, the recitation in claim 2 of "a left hand" and "a right hand," the recitation in claim 5 of "the occupant's elbows," and the recitation in claims 5-7 of "the occupant" are all directed to non-statutory subject matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 2 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Higashi et al. (U.S. Pat. No. 7,147,080).

Higashi et al. disclose rotating a steering handle (11) about an axis of a steering shaft (10), the steering handle being grasped by both hands of an occupant sitting on a seat, characterized in that the steering handle includes a left grip grasped by a left hand, and a right grip grasped by a right hand, the left grip and the right grip being rotatable about an axis perpendicular to the axis of the steering shaft (arrows in Figure 1A compared to arrows in Figure 3B). The left grip and the right grip are connected to each other by an interlocking mechanism (plate connecting the openings in Figure 1A) so as to be rotated in opposite directions from each other (when right grip is rotated toward the driver, the left grip is rotated away from the driver).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 63-128178 (as cited by Applicant) in view of Nakamichi (JP 11-48985, as cited by Applicant).

JP 63-128178 discloses rotating a steering mechanism about an axis of a steering shaft (3), the steering mechanism being grasped by both hands of an occupant sitting in a seat, characterized in that the axis of the steering shaft is inclined so as to be higher in level in a forward direction (Figure 3). JP 63-128178 does not disclose that the steering mechanism is a steering handle. Nakamichi, however, does disclose the use of a steering handle used with a corresponding steering shaft. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of JP 63-128178 in view of the teachings of Nakamichi to use a steering handle instead of a steering wheel in order to avoid troublesome twisting of the occupant's wrists while attempting to steer the vehicle.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishizaki et al. (U.S. Pat. No. 6,442,462) in view of Vacante (U.S. Pat. No. 3,669,465).

Nishizaki et al. discloses actuators (51M, 51S) for steering, and control means (60) for controlling the operation of the actuators in response to the operation of the operating members. Nishizaki et al. does not disclose left and right operating members grasped and operated by left and right hands of an occupant, characterized in that a locus of movement of each of the operating members by the operation provided by the occupant is on a spherical plane about a position of each of the occupant's elbows. Vacante, however, does disclose left (1) and right (2) operating members grasped and operated by left and right hands of an occupant (Figure 1), characterized in that a locus of movement of each of the operating members by the operation provided by the occupant is on a spherical plane about a position of each of the occupant's elbows (Figure 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Nishizaki et al. in view of the teachings of Vacante to have a locus of movement of two operating members be about a position of the occupant's elbows so that driver's arms are held in a comfortable horizontal position while steering the vehicle.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishizaki et al. in view of Higashi et al.

Nishizaki et al. discloses actuators (51M, 51S) for steering, and control means (60) for controlling the operation of the actuators in response to the operation of the operating members. Nishizaki et al. does not disclose left and right operating members grasped and operated by left and right hands of an occupant, characterized in that the operating members, when being moved upwards from their neutral positions, are moved in a direction toward the occupant. Higashi et al., however, does disclose left (left opening in plate 11) and right (right opening in plate 11) operating members grasped and operated by left and right hands of an occupant, characterized in that the operating members, when being moved upwards from their neutral positions, are moved in a direction toward the occupant (Figure 1A). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Nishizaki et al. in view of the teachings of Higashi et al. to have the operating members move toward the occupant so that the occupant does not have to stretch both of his or her arms in order to steer the vehicle, providing more comfortable steering.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishizaki et al. in view of Nakamichi.

Nishizaki et al. discloses actuators (51M, 51S) for steering, and control means (60) for controlling the operation of the actuators in response to the operation of the operating members. Nishizaki et al. does not disclose left and right operating members grasped and operated by left and right hands of an occupant, characterized in that the left and right operating members are rotatable about their left and right rotational axes while being rotated about a rotational axis, the left and right rotational axes being inclined to spread in a V-shape toward the occupant. Nakamichi, however, does disclose left and right operating members grasped and operated by left and right hands of an occupant, characterized in that the left and right operating members are rotatable about their left and right rotational axes while being rotated about a rotational axis, the left and right rotational axes being inclined to spread in a V-shape toward the occupant (Figure 2b). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Nishizaki et al. in view of the teachings of Nakamichi to have the operating members spread in a V-shape toward the occupant in order to avoid troublesome twisting of the occupant's wrists while attempting to steer the vehicle.

Allowable Subject Matter

9. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The cited prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DREW BROWN whose telephone number is (571)272-1362. The examiner can normally be reached on 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

db
6/6/09

/Paul N. Dickson/
Supervisory Patent Examiner, Art Unit 3616